

**APPARATUSES AND METHODS FOR MODELING SHARED BUS
SYSTEMS**

ABSTRACT

5 A software-implemented shared bus system model for modeling a shared bus
system that includes a plurality of devices interconnected via a shared bus. The
system model includes a first device model for partially modeling a first one of the
plurality of devices, the first device model including a first modified logical module
and a first modified I/O-specific module. The system model further includes a
10 sharable module having provisioned therein first shareable data. The first shareable
data is shareable by the first device model and another device model of the plurality of
device models. The first shareable data represents I/O-specific data associated with
the first device model that is also needed by the another device model of the plurality
of device models during configuration of the shared bus system model. The first
15 shareable data further represents data that would have been provisioned within the
first device model if the first device model had been configured to closely mimic the
data content of the first one of the plurality of devices, the first shareable data instead
being provisioned in the shareable module.

20